



355 West North Temple 3 Triad Center, Suite 350 Salt Lake City, Utah 84180-1203 801-538-5340

November 21, 1988

TO:

John Blake, State Lands

FROM:

Scott Johnson, Reclamation Engineer

RE:

Reclamation Estimate for the White River Shale Project,

Federal Tracts Ua and Ub, Uintah County, Utah

Attached is the estimate for final reclamation of the White River Shale Mine and facilities. The \$1,725,000 cost includes the following:

 a) Demolition and disposal of all buildings, tanks, and other surface structures;

b) Breakup and burial of all concrete foundations, portals and tanks:

c) Removal of power lines, poles and substations;

d) Plugging of all monitoring and water wells;

e) Sealing the birds nest aquifer zone in both the decline and shaft;

f) Sealing the shafts and decline at the surface;

g) Regrading of all surface disturbance to blend in with surrounding topography;

h) Revegetation of entire disturbed area (138 acres).

Also attached is a map that shows the disturbed areas and associated acreages. The reclamation work begins at the entrance gate to the property, and includes the complete reclamation of all roads beyond this gate. If you would like changes or additions made to this reclamation estimate, let me know. Also, let me know how I can help in the cost estimating for keeping the mine open.

jb Attachment cc: Lowell Braxton MN17/17 Reclamation Estimate for the White River Shale Project

Prepared By Utah State Division of Oil, Gas and Mining November 17, 1988

Description	Quantity	Unit	\$/Unit	Total Cost (\$)
Remove Buildings Gut and dispose of interiors	0.400	C		
Demolish building frameworks	9,400 6,500	Square Feet Cubic Yards	4.70 4.90	44,200 31,900
Subtotal				76,100
Breakup Concrete Foundations and Pads	40,000	Square Feet	3.80	152,000
Remove Power Lines		Lump Sum		35,000
Plug Monitoring Wells	20	Wells	8,000.00	160,000
Plug Water Wells	2	Wells	8,000.00	16,000
Mine Sealing				
Seal Decline Aquifer Zone - Concrete	1,350	Cubic Yards	80.00	108,000
- Bentonite Mix Seal Decline A 100' Below Vent Raise	4,700	Cubic Yards	19.00	89,300
Fill Decline A to Seal	3,500	Lump Sum Cubic Yards	0.60	2,400
Fill Decline Vent Raise	2,500	Cubic Yards	0.60 0.60	2,100 1,500
				203,300
Fill Intake Shaft Bottom	10,500	Cubic Yards	0.60	6,300
Break-up Collar in Aquifer Zone	13,200	Square Feet	3.80	50,200
Seal Shaft Aquifer Zone - Concrete	1,000	Cubic Yards	80.00	80,000
- Bentonite M <mark>i</mark> x	4,000	Cubic Yards	16.00	64,000
Fill Shaft Above Aquifer Zone	15,000	Cubic Yards	0.60	9,000
시민들은 이 사용을 하는데				209,500
Subtotal				412,800

Reclamation Estimate for the White River Shale Project

Prepared By
Utah State Division of Oil, Gas and Mining
November 17, 1988
(continued)

Description	Quantity	Unit	\$/Unit	Total Cost (\$)
Regrading Rip Roads Contour Retention Dam Contour Landfill Dam Contour Remaining Areas Move and Spread Topsoil Subtotal	26,100 195,000 33,000 125 129	Acres Linear Feet Cubic Yards Cubic Yards Acres Acres	0.40	3000 15,700 78,000 13,200 206,300 361,200
		674,400		
Revegetation Purchase Fertilizer Purchase Seed Mix Broadcast Seed and Fertilizer Scarify Seed Into Ground Subtotal	138 138 138 138	Acres Acres Acres Acres	40.00 / 80 110.00 140.00 12.00	5,500 15,200 19,300 1,700
Totals Contingency (10%)				1,568,000 156,800
TOTAL RECLAMATION COST (1988 Dollars)				1,725,000
TOTAL RECLAMATION COST (1993 Dollars)	@ 2.3% Annual	Inflation		1,933,000